Kkk. 469

THE GARDEN OF EDEN.

25.36

OR,

An accurate Description of all Flowers *and* Fruits *now growing in* England, *with particular Rules how to advance their* Nature *and* Growth, *as well in* Seeds *and* Herbs, *as the secret ordering of* Trees *and* Plants.

By that learned and great Observer,

Sir HUGH PLAT, *Knight.*

The Fourth Edition.

LONDON,
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TO THE
HONOURABLE
and moſt perfect
Gentleman,
FRANCIS FINCH *junior*,
of the Inner Temple,
Eſquire.

SIR,

YOu may pleaſe to pardon my forward inſcribing this Book to your name. Were it a

Work of mine own compoſition, I ſhould have thought on a meaner Patron. But the memory of that learned Knight *the* Authour (*to whom I had ſo neer Alliance*) *may excuſe this preſumption. He was a great Searcher after all ſorts of Knowledge, and as great a lover of it in all others. And I hum-*

humbly conceiv'd I could not doe him a higher ſervice than by placing his Book under your Protection, who are not more honour'd by thoſe many Noble Families *whence you are deſcended, than by that large Portion of* Learning *and* Vertue *which have ſo enriched your Noble mind; and rendred you pre-*

precious to all that know you. I hope that Candor and ſweetneſs which accompanies all your Actions, will alſo ſhew it ſelfe in acceptation of this Offering from him who is ambitious of no other title than

SIR,
The moſt humble and moſt devoted of all thoſe that honour you

CHARLES BELLINGHAM.

The PUBLISHER
To the Reader.

I Shall not bluſh to tell you, I had ſome ambition to publiſh this Book, as well to doe right to the learned Author (my ever honoured Kinſman) as to check their forwardneſſe who were ready to violate ſo uſefull a Work. There are ſome men (of great name in the world) who made uſe of this *Author*, and

and it had been civil to have mentioned his name who held forth a candle to light them to their desires; but this is an unthankfull age. And whatever you may think of this small Piece, it cost the *Author* many yeares search, and no small expence, there being not extant, in our language) any work of this Subject so necessary and so brief. He had consultation with all Gentlemen, Scholars, nay not a Gardiner in *England* (of any note) but made use of his Discoveries, and confirm'd his *inventions* by their own *Experience*. And what ever they discover'd (such was his modesty) he freely acknowledges by naming the Authors, sometimes in words at length

length, as Mr. *Hill*, Mr. *Taverner*, M. *Pointer*, M. *Colborn*, M. *Melinus*, M. *Simson*, and sometimes by *T. T. A. P.* &c. What ever is his own hath no name at all, unlesse sometimes (and that not often) he add *H. P.* at the end of the Paragraph. And when he refers you to some other part of the Book, 'tis according to the *Number* or *Section*, not the *Page*, for that onely serves for the *Table*. He wrote other pieces of *Natural Philosophy*, whereunto he subjoyned an excellent Abstract of *Cornelius Agrippa de Occulta Philosophia*; but they fell into ill hands, and worse times. As for this Collection of *Flowers* and *Fruits*, I would say (if I had not so near Relation to it) that

that no *Engliſh man* that hath a *Garden* or *Orchard* can handſomely be without it, but at leaſt by having it will finde a large benefit. And all Ladies and Gentlemen by reading theſe few leaves may not only advance their knowledge and obſervation when they walke into a Garden, but diſcourſe more ſkilfully of any Flower, Plant, or Fruit then the Gardiner himſelf, who (in a manner) growes there night and day. *Farewell.*

C. E.

The Author's *Epiſtle*

To all Gentlemen, Ladies, and all others delighting in God's Vegetable Creatures.

Having out of mine own experience, as alſo by long conference with divers Gentlemen of the beſt ſkill and practice, *in the altering, multiplying, enlarging, planting, and tranſplanting of ſundry ſorts of* Fruits & Flowers, *at length obtained a pretty volume of experimentall obſervations in this kind: And not knowing*

knowing the length of my daies, nay, assuredly knowing that they are drawing to their period, I am willing to unfold my Napkin, and deliver my poor talent abroad, to the profit of some, who by their manuall works, may gain a greater imployment than heretofore in their usual callings: and to the pleasuring of others, who delight to see a rarity spring out of their own labors, and provoke Nature to play, and shew some of her pleasing varieties, when shee hath met with a stirring workman.

I hope, so as I bring substantiall and approved matter with me, though I leave method at this time to Schoolmen, who have already written many large and methodicall volumes of this subject (whose labours have greatly fur-

furniſhed our Studies and Libraries, but little or nothing altered or graced our Gardens and Orchards) that you will accept my skill, in ſuch a habit and form as I ſhall think moſt fit and appropriate for it; and give me leave rather to write briefly and confuſedly, with thoſe that ſeek out the practicall and operative part of Nature, whereunto but a few in many ages have attained, then formally and largely to imitate her Theoriſts, of whom each age affordeth great ſtore and plenty.

And though amongſt theſe two hundred experiments, there happen a few to faile under the workmans hand (which yet may be the Operators miſtake not mine) yet ſeeing they are ſuch as carry both good ſenſe and probability

bility with them, I hope in your courteſie I ſhall find you willing to excuſe ſo ſmall a number, becauſe I doubt not, but to give good ſatisfaction in the reſt.

And let not the concealing, or rather the figurative deſcribing of my laſt and principall ſecret, withdraw your good and thankfull acceptation, from all that go before; on which I have beſtowed the plaineſt and moſt familiar phraſe that I can: for, Jo. Baptiſta Porta *himſelf, that gallant and glorious Italian, without craving any leave or pardon, is bold to ſet down in his* Magia naturalis, *amongſt many other concluſions of Art and Nature, four of his ſecret skils, (viz. concerning the ſecret killing of mẽ, the precipitation of ſalt out of ſea water, the multiplying of*

Corne

corn two hundred fold, which elſe-where I have diſcovered: & the puffing up of a little paſt, to the bigneſſe of a foot-ball) in an obſcure and Ænigmatical *phraſe. And I make no queſtion, but that if he had known this part of vegetable Philoſophy, he would have penned the ſame as a* Sphinx, *& roll'd it up in the moſt cloudy and darkſome ſpeech that he could poſſibly have deviſed.*

This Author, I ſay, hath emboldened me, and ſome Writers of more worth and higher reach then himſelf, have alſo charged me, not to diſperſe or divulgate a ſecret of this nature, to the common and vulgar eye or ear of the world.

And thus having acquainted you with my long, coſtly, and laborious Collections, not written at

at adventure, or by an imaginary conceit in a Scholars private ſtudy, but wrung out of the earth by the painful hand of experience: and having alſo given you a touch of Nature, whom no man as yet ever durſt ſend naked into the world without her veile; and expecting, by your good entertainment of theſe, ſome encouragement for higher and deeper diſcoveries hereafter, I leave you to the God of Nature, from whom all the true light of Nature proceedeth.

H. P. *Knight.*

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The

THE GARDEN OF EDEN.

OR,

A briefe Deſcription of all ſorts of *Fruits* & *Flowers*, with meanes how to advance their nature and growth in *England*.

I Shall not trouble the Reader with any curious rules for ſhaping and faſhioning of a *Garden* or *Orchard*; how long, broad, or high the Beds, Hedges, or Borders ſhould be cõtrived; For every man may diſpoſe it as his Houſe or quantity of ground requires. And (to deale

deale freely) I look on such work as things of more facility then what I now am about. Every Drawer or Embroiderer, nay (almost) each Dancing-Master may pretend to such niceties; in regard they call for very small Invention, & lesse learning. I shall therefore speake to that which common searchers passe over, or never aymed at, being somewhat above their reach, who neglect the cause of what they find effected. Yet I shall begin with the ground, soile, or earth it selfe, as the Foundation of all; still confessing what light or assistance I had from those who imployed their hours this way as well as my selfe.

2. Break

2. Break up your ground, and dung it at Michaelmas. In Januar. turn your ground three or four times, to mingle your dung and earth the better, rooting up the weeds at every time. Proved by Mr. *T. T.* Tempering the ground.

3 In winter time, if you cover the ground which you meane to break up in the Spring, with good ſtore of Fern, it keepeth down graſs and weeds from ſpringing up in winter, which would ſpend ſome part of the heart of the ground, and it doth alſo inrich the ground very much, for all manner of Roots and hearbs. By *Mr. And. Hill.* Aſhes of Fern are excellent. Fern to enrich ground.

4. *Quære*, of enriching Soot to enrich ground

ground with Soot, which Mr. *Stutfield* (that married my Lord *North's* Brothers Daughter) assured me to have found true in pasture grounds, the same onely strewed thinly over.

Shavings of horn to enrich ground.

5. Shavings of Horn strewed upon the ground, or first rotted in earth, and (after) that earth spread upon the ground, maketh a Garden ground very rich. *Probatum* at *Bishops Hall*, By H.P.

Onyons & Bay-salt.

6. Onions & Bayſalt sowen together, have prospered exceeding well.

Age of seeds.

7. The surest way to have your seeds to grow, is to sow such as are not above one year old, T. T.

Hearbs with great heads.

8. If hearbs be nipped with the fingers, or clipped, they will

will grow to have great heads. T. T.

Choice of seeds.

9. Chuſe ſuch ſeeds as be heavy, & white within, *T. T.*

Dung for potherbs

10. Swines & Pidgeons dung are good for potherbs and ſifted aſhes laid about them, killeth Snails, T. T.

To kill Snailes.

Roots made large.

11. If you would have Garlick, parſnep, radiſh, turnep, carot, *&c.* to have a large root, tread down the tops often, elſe the ſap will run into the leaves, T. T.

Chuſing of a Vine cutting.

12. Take the cutting of a Vine from a branch that ſpreadeth moſt in the midſt of the Tree, and not from the loweſt nor the higheſt branch, having five or ſix joynts from the old ſtock, and it would be a cubit long or more: plant it in

Vine when to plant.

Octob. or March. T. T.

Young Vines to proine.

13. Proine not your young Vines untill they have had three years growth. T.T.

Bayes to plant.

14. Every ſlip of a Bay tree will grow, ſtrip off the great leaves, and ſet them in March when the ſap beginneth to riſe. T. T.

Eldern to plant.

15. Every plant of an Eldern will grow. T. T.

Leeks to grow great.

16. Firſt, put ſome good fat dung into water, and therein water your Leekes one night, and make your beds of good fat dung, that the dung may be a foot at the leaſt in depth: then cover the bed with Fern, and ſet the Leekes with a great planting ſtick, and fill not the holes with earth, but water them once in two dayes

dayes and no more; after this maner of ſetting I have ſeen Leekes as great as the ſtemme of a ſpade. T.T.

17. Sow Lettice in Auguſt for Winter. T.T.

Lettice to ſowe.

18. After the Lettice is all blowen, and ſome of the bolles begin to bear a white poff, then cut off the whole great ſtem, and lay it a drying in the ſun: and when it is dry, beat it up and down with thy fiſt upon a boord, & put altogether in a diſh, & blow away ſoftly all the duſt. T.T. And if you ſow or ſet your lettice in the ſhade they will be very great.

Lettice ſeed how to gather.

Lettice to grow great.

19. When it hath bolles, cut it up, and lay all the hearb to dry in the ſhadow then beat it out. T. T.

Purſlane ſeed to gather.

Wood Strawberries into Gardens.

20. Strawberries which grow in woods, prosper best in Gardens: and if you will transplant them forth of one Garden into another then enrich the last ground by watering the same either with Sheeps dung, or Pidgeons dung infused in water; by Master *Hill.*

Watering of strawberries.

Roses grafted upon what stock.

21. The muske and yellow Rose, and all those double and centiple Roses, may well be grafted in the bud upon the Sweet-brier. By Mr. *Hill.*

Pompions to grow great.

22. If you would have Pompions to grow exceeding great, first plant them in a rich mold, then transplant those sets into other fat mold, watring them now and then with the water

ter wherein Pidgeons dung hath been infuſed, then take away all the hang-bies, maintaining only one or two main runners at the moſt, and ſo you ſhall have them grow to an huge bigneſſe. Proved by Mr. *Hill.* You muſt nip off theſe ſide branches about bloſſoming time, with their flowers and fruits; and take heed you hurt not the heads of the main runners, for then your pompions will prove but dwindlings.

23. In winter time raiſe little hills about your Artichokes cloſe to the leaves, becauſe they are tender; and if any extream froſts ſhould happen, they might

Artichokes from froſt. See this in Numb. 26. 58.

otherwiſe be in danger to periſh.

Musk roſe to beare late.

23. If you cut away the old branches of a Muske-roſe, leaving onely the ſhoots of the next year to bear; theſe ſhootes will bring forth musk roſes the next year, but after all other musk-roſe trees. By Mr. *Hill.*

Roots in their beſt ſtrength.

25. The roots of every tree and plant, are moſt full of ſap when their tops or heads are moſt green and flouriſhing: and when the bark of the Tree will pill and looſen from the body, then will the rind alſo looſen from the root; and when the tops begin to wither or ſtand at a ſtay, then doe the rootes likewiſe.

And

And therefore that common opinion, that rootes are beſt and of moſt force in Winter, is erroneous. So as if I ſhould gather any roots, for the uſe of Phyſick or Surgery, I would gather them either at their firſt putting forth of leaves, or elſe between their firſt ſpringing, & the ſpringing up of their branches, when they begin to encline towards their flowring. By A. H.

Artichocks from froſt. 23, 58.

26. If every evening you lay a great colewort or cabbage leaf upon the top of every Artichoke, this will defend the apple from the violence of the froſt. By *Goodman* the Gardiner.

Flowers or leaves gilded and growing.

27. A branch of Box or Roſe-

Quære of Ilinglaſſe diſſolved.

Roſemary will carry their leaves gilded a long time fair, notwithſtanding the violence of rain, if you firſt moiſten the leaves with the gum of Maſtick, firſt diſſolved in a hard egge according to art, and leafe-gold preſently laid thereon. Do this in a Summers day, when all the dew is aſcended, and when the Sun being hot, may preſently harden the Maſtick, and ſo bind down the gold faſt unto it. *Quære*, if Myrrhe and Benjamin will not do the like, diſſolved as before.

Flowers candied as they grow

28. Make gum water as ſtrong as for Inke, but make it with Roſe-water; then wet any growing flower therewith, about ten of the clock

clock in a hot Summers day, and when the Sun ſhineth bright, bending the flower ſo as you may dip it all over therein, and then ſhake the flower well; or elſe you may wet the flower with a ſoft callaver pencill, then ſtrew the fine ſearced powder of double refined ſugar upon it: do this with a little box or ſearce, whoſe bottom conſiſteth of an open lawn, & having alſo a cover on the top; holding a paper under each flower, to receive the ſugar that falleth by: and in three houres it will candy, or harden upon it; & ſo you may bid your friends after dinner to a growing banquet: or elſe you may cut off theſe flowers

ers ſo prepared, and dry them after in diſhes two or three dayes in the ſun, or by a fire, or in a ſtove; and ſo they will laſt ſix or eight weeks, happily longer, if they be kept in a place where the gum may not relent. You may doe this alſo in Balme, Sage, or Borrage, as they grow.

A Garden within doors.

29. I hold it for a moſt delicate and pleaſing thing to have a fair Gallery, great Chamber or other lodging, that openeth fully upon the Eaſt or Weſt ſun, to be inwardly garniſhed with ſweet Hearbs and Flowers, yea and Fruit if it were poſſible For the performance whereof, I have thought of theſe courſes following.

Firſt

Firſt, you may have faire ſweet marjerom, baſil, carnation, or roſe-mary pots, &c. to ſtand looſely upon faire ſhelves, which pots you may let down at your pleaſure in apt frames with a pulley from your Chamber window into your Garden, or you may place them upon ſhelves made without the room, there to receive the warme ſun, or temperate raine at your pleaſure, now and then when you ſee cauſe. In every window you may make ſquare frames either of lead or of bords, well pitched within: fill them with ſome rich earth, and plant ſuch flowers or hearbs therein as you like beſt; if hearbs you may

may keep them in the ſhape of green borders, or other forms. And if you plant them with Roſemary, you may maintain the ſame running up the tranſumes and movels of your windowes. And in the ſhady places of the room, you may prove if ſuch ſhady plants as do grow abroad out of the Sun, will not alſo grow there: as ſweet Bryars, Bayes, Germander, *&c.* But you muſt often ſet open your Caſements, eſpecially in the day time, which would be alſo many in number; becauſe flowers delight and proſper beſt in the open aire. You may alſo hang in the roof, and about the ſides of this room, ſmall pom-

pompions or Cowcombers, pricked full of Barley, firſt making holes for the Barley (*quære*, what other ſeeds or flowers will grow in them) and theſe will be overgrown with green ſpires, ſo as the Pompion or Cowcomber will not appear. And theſe are *Italian* fancies hung up in their rooms to keep the flies from their Pictures: in Summer time, your chimny may be trimmed with a fine bank of moſs, which may be wrought in works being placed in earth, or with Orpin, or the white flower called *Everlaſting*. And at either end, and in the middeſt place one of your flower or Roſemary pots, which you may

Barly growing without earth.

may once a week, or once every fortnight, expoſe now and then to the ſunne and rain, if they will not grow by watering them with raine water; or elſe, from platformes of lead over your windows, raine may deſcend by ſmal pipes and ſo be conveyed to the roots of your hearbs or flowers that grow in your windowes. Theſe pipes would have holes in the ſides, for ſo much of them as is within the earth, and alſo holes in the bottome, to let out the water when you pleaſe in great ſhowers And if you back the borders growing in your windowes with looſe frames to take off and on, within the inſide

inſide of your windows, the Sun will reflect very ſtrongly from them upon your flowers and hearbs. You may alſo plant Vines without the walls, which being let in at ſome quarrels, may run about the ſides of your windows, and all over the ſealing of your rooms. So may you do with Apricot trees, or other Plum trees, ſpreading them againſt the ſides of your windowes. I would have all the pots wherein any hearbs or flowers are planted, to have large looſe ſquares in the ſides; and the bottoms ſo made, as they might be taken out at ones pleaſure, and faſtned by little holes with wiers unto their pots,

Pots for flowers of a good faſhion. See this alſo Numb. 56.

thereby to give freſh earth when need is to the roots, and to remove the old and ſpent earth, and ſo in your windowes: See more of this in *Numb.* 30.

Roſes or Carnations in winter.

30. To have Roſes or Carnations growing in Winter, place them in a Room that may ſome way be kept warm, either with a dry fire, or with the ſteam of hot water conveyed by a pipe faſtened to the cover of a pot, that is kept ſeething over ſome idle fire, now and then expoſing them in a warm day, from twelve to two, in the Sun, or to the rain if it happen to rain; or if it rain not in convenient time, ſet your pots having holes in the bot-

bottom in pans of rain wa ter, & ſo moiſten the roots.

I have known Maſter *Jacob* of the Glaſſehouſe to have Carnations all the winter by the benefit of a room that was neare his glaſſe houſe fire; and I my ſelf, by nipping off the branches of Carnations when they began firſt to ſpire, & ſo preventing the firſt bearing, have had flowers in Lent, by keeping the pots all night in a cloſe room, and expoſing them to the Sun in the day time, out at the windowes, when the wather was temperate: this may be added to the Garden (mentioned *Nu.* 29.) to grace it in winter, if the roome ſtand conveniently

for the purpoſe.

Reviving of Carnations.

31. You ſhall oftentimes preſerve the life of a Carnation or Gilliflower growing in a pot, that is almoſt dead and withered, by breaking out the bottom of the pot, and covering the pot in good earth, & alſo the old ſtalks that ſpring from the roots; but every third or fourth year, it is good to ſlip and new ſet them.

Orchard of dwarf trees.

32. If you make an Orchard of dwarf-Trees, ſuffering none of them to grow above a yard high; then may you ſtrain courſe Canvas over your Trees in the blooming time, eſpecially in the nights and cold mornings, to defend them from the froſts: And this Canvas

Canvas being ſuch as Painters uſe, may after be ſold with the loſſe onely of a penny upon the ell. You may uſe it onely for Apricots, and ſuch like rare fruit whoſe bloſſoms are tender; or elſe to backward them after they be knit, if you would have them to beare late when all other Trees of that kind have done bearing. In this dwarf Orchard I would have the walks between the Trees either paved with brick, or graveled, and the gravel born up with bricks, that the ſun might make a ſtrong reflection upon the Trees, to make them bear the ſooner. And to bring forth the better digeſted fruit, I

would also have the plot so chosen out, that all easterly and northerly winds may be avoided by some defence. I would have it but a small Orchard; and if it were walled in, it were so much the better. Help this Orchard with the best artificial earths and waters that are. I think a Vineyard may thus be planted, to bring forth a full, rich, and ripe Grape: or if you could happen upon a square pit of a yard deep, whose banks are sloaping. & whose earth have been philosophically prepared (as before *Num.* 10.) & that your Trees were bound sloaping to the sides of your Orchard, and backed with boards, or lead, for re-

Vineyard to plant.

reflexion, that ſo your trees would proſper and beare moſt excellent fruit: And to keep your Trees low, when your ſtock is at ſuch height as you would have it, nip off all the green buds when they come firſt forth, which you finde in the top of the Tree, with your fingers; and ſo, as often as any appeare in the top, nip them off: and ſo they will ſpread but not grow tall; even as by nipping off the ſide buds onely, you may make your Tree to grow ſtreight and tall, without ſpreading, till you ſee cauſe: And thus with your fingers onely, and vvithout any toole, you may keep your young Trees grovving in

Trees growing either high or lowe.

what form you pleaſe.

Early fruit

33. To have early fruit, you muſt have an eſpecial care to plant or graffe ſuch fruits, as are the earlieſt of all other, and then adde all artificial helps thereto.

Old trees recovered

34. Two quarts of Oxe-bloud or Horſe bloud for want thereof, tempered with a hat full of Pidgeons dung, or ſo much as will make it up into a ſoft paſte, is a moſt excellent ſubſtance to apply to the principal roots of any large tree, faſtening the ſame about them, after the root of the Tree hath taken ayr a few dayes, firſt, by lying bare: and it will recover a Tree that is almoſt dead, and ſo likewiſe of a Vine. For this will

Vines recovered.

will make a decaying Tree or Vine to put forth both bloſſoms and fruits afreſh. This muſt be done to the Tree about the midſt of *February*, but apply it to the Vine about the 3d or 4th of *March*. This is of *M. Nicholſon* Gardiner.

Ordering of the Musk-Mellon.

35. Get a load or two of freſh Horſe dung, ſuch as is not above 8. or 10. dayes old, or not exceeding fourteen: lay it on a heap till it have gotten a great heat, & then make a bed thereof an ell long, and half a yard broad, and eighteen inches high, in ſome ſunny place, treading every Lay down very hard as you lay it; then lay thereon three inches thick of fine black ſifted

ſifted mold; prick in at every three or four inches diſtance a Muſke mellon ſeed, which hath firſt bin ſteeped twenty four hours in Milk: prick the top of your bed full of little forks of wood appearing ſome four or five inches above ground; upon theſe forks lay ſticks, and upon the ſticks ſo much ſtraw in thickneſſe, as may both keep out a reaſonable ſhowre of rain, and alſo the ſun, & likewiſe defend the cold (ſome ſtrain canvas ſlopewiſe onely over their beds) let your ſeeds reſt ſo untill they appeare above ground, which will commonly be in ſix or ſeven dayes. You muſt watch them carefully when they firſt

firſt appeare; for then you muſt give them an howers ſunne in the morning, and another in the afternoon; then ſhall you have them ſhoot an inch and a halfe by the next morning; then ſtrew more fine earth about each ſtalk of ſuch plants as have ſhot higheſt, like a little hill to keep the Sun from the ſtalks: for if the Sun catch them, they periſh; and therefore you ſhal often ſee the leaves freſh, when the ſtalks wither. Heighten your hills, as you ſhall perceive the ſtalk to ſhoot higher and higher. The plants muſt remain till they have gotten four leaves, and then remove them, taking up earth and dung together

The ſhorteſt way is to buy plants and ſet them.

gether carefully about every root: make a hole fit for every of them good ground, placing them (if the ground ſerve) upon an high ſlope bank, which lyeth aptly for the morning ſun, if you may; let this bank be covered with field ſand two inches thick all over, except neare about the plants (this ripeneth & enlargeth the fruit greatly) then cover each plant with a ſugar pot, gilliflower pot, or ſuch like, having a hole in the bottom; or elſe prick in two ſticks acroſſe, archwiſe, and upon them lay ſome great leaves to keep your plants from rain, ſun and cold. After they have been planted a day or two, you

you may give them two houres ſun in the morning, and two in the evening, to bring them forward, but, till they have ſtood 14. dayes, be ſure to cover them from 12 to 4 in the afternoon every day, and all night long. Theſe pots defend the cold, and keep out all worms from ſpoyling your plants; and therefore are much better then leaves. Note, that you muſt defend them in this manner in the day time, until your plants have gotten leaves broad enough to cover their ſtalks and roots, from all injury of weather; and then may you leave them to the hot Sun all the day long.

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If there be cauſe, you muſt with rain water, water them now and then, but not wetting the leaves. And if by any exceeding cold, or moyſture, your plants doe not ſhoot forward ſufficiently, but ſeem to ſtand at a ſtay, then take ſome blood and pidgeons dung tempered (as before in *Num.* 34.) apply the ſame to the roots of the young plant; leaving ſome earth betwixt the roots, and the ſame will make them to ſhoot out very ſpeedily. Remember to plant three plants together in each place, being round, and a little deep, and of the bigneſſe of a round trencher. Now when they have ſhot out all their

their joynts (which you ſhall perceive when you ſee a knot at the very end of the ſhoot, which is ſomewhat before the flowring time) then ſome do uſe to cover every knot, or joynt, with a ſpade or ſhovel full of fine and rich earth; and thereby each knot will root, and put forth a new ſhoote (*quære*, of the ſame courſe in Pompions or Cowcumbers) by means whereof you ſhall have great increaſe of Mellons.

Pompions and Cowcumbers multiplied

When your Mellons are as big as Tennis Balls, then if you nip off at a joynt, all the ſhoots that are beyond them, the Mellons will grow exceeding great; for then

Mellons to growe great.

then the ſap doth not run any more at waſte. But ſome hold, that you ſhall have greater Mellons though not ſo many, if you ſuffer their ſhoots to run on without earthing the knots; and then, when when you ſee your Mellons of the bigneſs of Tennis balls (as before) then nip off, at a joynt, all the ſhoots that are beyond the Mellons, but meddle not with the chief runner. This of Mr. *Nicholſon* Gardiner. Lay your young Mellons upon Ridge-tiles, to keep them frõ the ground, and for reflection.

Earlie ſtraw-berries.

35. Make a high bank, ſlopewiſe like a penthouſe, that openeth to the Sun, and is by ſome means defended

fended from all hurtfull winds: plant your Strawberries therein, and water them with the infuſion of ſome apt dung, now and then, when the weather is dry.

37. Bow down the branches of Roſes, having buds upon them, into a veſſel of wood pitched, ſtanding within the ground, to keep them long upon the ſtalk, or to prevent froſts if you ſee cauſe. Roſes to bear late, and from froſt.

38. *Quære*, What Pigeons dung and bloud, applyed to the rootes of Roſes, or Carnations, will do, in the forwarding of their bearing. Early Roſes and Carnations.

39. Plant Roſes, according to the manner ſet Early Roſes.

down for Strawberries before (*Num*: 36.) to have them before all others.

Carots, parſeneps, and Turneps, kept long.

40. Make a Lay of ſand, and a lay of carot rootes, cutting away the toppes cloſe to the root, with ſome of the ſmall ends of the carots; do this in October or Novemb: in dry weather: and about the laſt of December where there is no froſt, unpack them againe; and if you will then keep them longer, you muſt pare off the ſhooting at the upper end of the root, and then lay them in ſand. This out of *Gardiners* Kitchin-Garden, printed 1599. So of Parſneps and Turneps.

Roſes and flowers backward.

41. *Quære*, If binding the bark ſomewhat hard with a

a packthred, or rather with Brawn-bands, will not keep roſes, and other flowers and fruits, long from blowing, by ſtaying the ſap from riſing.

Quære, of doing thus after the roſe is new budded.

42. To have rootes proſper and grow great, you muſt trench your dung about the depth of your root which you would ſow; and if the root once get into the dung, then it forketh, and gathereth *fibras*, whereas otherwiſe it will grow wholly into a long, round, and fair root, of Mr. *Andr. Hill.*

Roots long and great.

43. But if you deſire to multiply your ſeed, not reſpecting the rootes, then mix your dung firſt well rotted with good mold,

Seeds to multiply.

and therein ſow your ſeeds and they will encreaſe much: ſo as for ſeedes the dung muſt lye in the top, and for rootes in the bottom. By Mr. *Andr. Hill.*

Large Carots, or parſneps.

43. Gather your carot or parſnep ſeeds &c. from the higheſt ſpiring branches, and out of ſome friends Garden, where you may be ſure of the beſt; ſow theſe ſeeds about March, or Aprill: and at drawing time chooſe the faireſt roots of all other; cut off their tops ſomewhat low, and ſet them againe, and then let them ſeed the next yeare; then take the ſeedes from the higheſt toppes and ſow them, and ſo ſhall you have moſt faire and large rootes.

This

This of Maſter *Hunt*, the good horſeman.

44. Take off the tops as far as the green goeth, *viz.* till you come to the wood, from Carnations, Gilliflowers, &c. ſlit them upward thorough the nethermoſt joynt, thruſting between the joynts ſome fine ſearced earth, made firſt into pap; and with the ſame pap cloſe the ends round about as big as a Walnut: make holes in your pots, and put in your tops ſo earthed; theſe do ſeldome or never faile. By Miſtris *Hill*. Alſo, the old root is here preſerved, and you may carry theſe tops thus earthed 100 miles in a box. *Quære*, if this ſecret will not alſo extend to

A new planting of carnations, wall-flowers, & ſtock gilliflowers.

Plants to carry far.

to ſtock Gilliflowers, Wall-flowers, &c.

Branches to root.

45. Cut off a bough from any tree; and two inches from the bottom, take away the bark round about, prick it into the ground, and it will grow. *Quære.*

To kill Wormes.

46. In the end of February or March, wet the ground firſt, and about eight or nine of the clocke at night, by candle-light, gather up all the Wormes in diſhes, and ſo you may deſtroy them.

Rich mold

47. A Rich mold for a Garden: See among the Trees. *Numb:* 29.

When to ſet or ſow.

48. Set or ſow Kernells in November, Nuts in February, ſtones of fruit in March, all in the increaſe of

of the Moon.

49. *Quære*, Of graffing roſes, the ſplicing way, and ſo of thyme, roſemary, hyſſope, &c. to be graffed in this manner, either one upon another, or graffing them upon the boughes or branches of trees, if happily they will take.

One plant upon another, or upon a tree.

50. Whether the colour, ſent, or taſt, may be altered in a Flower or Hearb, by Art, ſee the Title, *Trees and Plants, numb:* 90.

Colour, ſent, or taſte of a flower, altered.

51. Inſtead of privy hedges about a quarter, I commend a Fence made with lath or ſticks, thinly placed and after graced with dwarf apple, and plumme Trees, ſpred abroad upon the ſtick.

Fence of fruit trees.

52. When

White-thorn hedge.

52. When you would have a ſtrong and ſpeedy White-thorne hedge about your garden, ſet your plant high and ſloping, and not flat, after the common manner. Prick in the cuttings, with the ſlope ſide downward, that the rain may not get in between the Wood and the Bark. Weed theſe hedges twice every yeare, and as the ſprowts doe grow of ſome length, let them be platted, or brayded upward from the ditch; defend them from Cattell with a dry or dead hedge.

Carnation ſeed to gather.

53 Let Carnations or Gilliflowers ſhed their leaves, and leave the cods ſtanding upon the root till

till the end of October, *viz.* ſo long as you may for the danger of froſt: then cut off the ſtems with the cods upon them; ſtick them upright in ſome dry place in an upper roome, and ſo let them reſt untill the Spring, then ſow them. Your Carnation ſeed will prove faire large pink, and beare in Carnation time; by S.

Coleflower ſeed to gather & to plant.

54. Your Coleflower ſeed will not ripen till Michaelmas, or a week after; let it ſtand ſo long or longer, if you feare not froſt, before you gather the ſeeds, which grow in yellow cups; and being ripe, are alſo yellow themſelves.

Be ſure you gather the cups before the ſeedes be ſhed;

ſhed; put theſe ſeeds with their cups or cods in a box, but cover not the box, and keep the box in ſome place from the froſt: prick them in about the full of the Moon in Aprill, when cold weather is ſpent: remove them when they have gotten four leaves, and in the full of the Moon in any caſe. Remove ſome of them in ſeverall moneths, and ſo you may ſave them growing with Coleflowers till Chriſtmas. Your ground cannot be too rich for them; the beſt removing is not till June and July, and thoſe of leaſt growth, are beſt to remove late, to bear in Winter. Cover each Coleflower in froſty weather,

Coleflower to bear late.

ther, every night with two of their great leaves, faſtned in two places, with two woodden pricks. Do this alſo in cold gloomy dayes, when the ſun ſhineth not.

55. Graft the branches of Carnations the ſplicing way, as in ſmall twigges of Trees, placing upon each branch a ſeverall coloured flower, but let the branches which you graft, be woody enough. By 8. Divers carnations in one root.

56. Cauſe large Carnation pots to be made, *viz.* double in bigneſſe to the uſuall pots, let them have ranks of ſloping holes, of the bigneſſe of ones finger, each rank one inch diſtant from another. Set in the midſt of the pot a Carnation, Stately pots for carnations As before Num. 9.

tion, or a Lilly, and in every of the holes, a plant of thyme or hyſop; keep the thyme or hyſop as it groweth, even with clipping, or in the forme of frets or borders, and ſet theſe pots upon faire pillars in your Garden, to make a beautifull ſhew. Alſo, you may either of ſtone or wood, make pyramides, loſinges, circles, pentagons, or any forme of beaſt or fowle, in wood, or burnt clay, full of ſlope holes (as before) in Gilliflower pots; theſe being planted with hearbes, will very ſpeedily grow greene, according to the forme they are planted in: And in this manner may you in two yeares ſpace, make a high

Birds, beaſts, pyramides &c. to grow ſpeedily.

high pyramid of thyme, or roſemary. In hot weather, they would be ſhaded with ſome ſtrained canvas from the ſun,* and watered now and then by ſome artificiall meanes. Alſo, a fret or border may be cut out in wood or lead, and after placed in a Garden when the hyſope or thyme ſides are growne to ſome height to be let thorough the cuts, and alwayes after kept by clipping, according to the worke of the border, or fret: let the earth ſettle well before you ſow your ſeeds; water with an infuſion of dung, or good earth, becauſe otherwiſe the earth within your molds will ſpend, and then your plants will decay. 57. Sow

* See after in *Num.* 84.

Delicate frets or borders.

The wood may be laid in ſome oyle colour.

Earth ſtrengthned.

To ſow Anniſeeds in *England.*

57. Sow Engliſh Annis ſeeds when the Moon is at the full in February, or any time between the full and the change: if froſts will not ſuffer you to take the full Moon, hatch them into the ground, with a rake ſtricken thick upon them: then ſtrew new horſ-dung thinly upon the ground, to defend the ſeedes from the froſt. Theſe will ripen about *Bartholomewtide*; then reſpecting the Moon as before, ſow againe, and theſe ſeeds will be ripe ſooner then thoſe which were ſowen in February. Theſe ſeeds will alſo come up well, being ſelf-ſowen, only break up the ground about them when they begin

gin to ripen. That ground which you would ſow in February, breake up about Michaelmas; let it lye and crumble all the Winter: then when you meane to ſow, ſtir it up againe, that it may be mellow; for, the mellower the better. A black rich mellow ground is beſt, and they like well in a rich dunged ground: Proved by S.

Artichocks from froſts

58. Having well earthed your Artichocks, then ſtrew upon them ſome freſh horſ-dung, one inch in thickneſſe, and ſo leave them all the winter: By 23. 56.

Oniõ ſeeds ordered.

59. Sow Onion ſeeds in February within eight dayes after the full at the fartheſt (but the neerer the full

full, the better, ſo all will go to ſeed, or head, and not grow to ſcallions: after you have ſowed them, cover them as you did your Annis ſeeds, before in *Num.* 57. By S.

Early and late Peſcods.

60. Sow the early Peaſe as neer Midſommer as the Moon will ſuffer, if you would have them come about ſix weekes after Michaelmas: but if you would have them ripe in May, then ſow them in the beginning of September, ſomewhat before or after, as the Moon will give you leave: at the full is good, or three dayes before the full, and till eight dayes after the full, is alſo good: theſe will be ripe in May.

Make

Make your holes about one inch and a halfe deepe, wherein you ſet your peaſe; let the ground be rich, mellow, and ordered, *as before*, (*numb.* 57.) in Annis ſeeds; beare them up with ſtickes, as they doe the Garden-peaſe; cover them after they be ſet with new horſdung about halfe an inch thick, all over; and (if you may poſſibly) plant them ſo, as that they may be defended from the North, and Northeaſt, by reaſon of ſome hedge or wall. *Quære*, of covering them with unſleakt lime powdered, after they have been ſteeped in ſome apt liquor a convenient time; by S.

Coliander to ſow.

61. Sow Coliander ſeeds in

in February, reſpecting the Moon as in Annis ſeedes, (*Num:* 57) but they need no dunging: By S.

Sap of Briony, to gather.

62. In Aprill make a deep overthwart cut or gaſh into a Briony root, taking away the earth firſt from it; put in a Gooſ-quill a little under the ſlit, ſloping the quill at the end which you thruſt into the root: but firſt make a hole with your knife to get in the quill, and ſo you may gather great ſtore of the water of Briony, placing a Receiver under the quill; By S.

Roſes to beare late.

63. *Quære*, If one may not prevent the early budding of the Roſe, by croſſ-hacking the bark (as in trees to kill moſſe, or to ſtay

ſtay their ſap from riſing.)

Roſes and carnations multiplyed

65. You may multiply many rootes from a province roſe, and the double muſk-roſe, (*quære*, of Carnations) if you buy a grafted roſe tree, that hath gotten many ſprowts from the place graffed, and ſetting the root ſo as the body may lye ſloping neer the earth: then lay as many of the branches as you may conveniently into the earth, looſing every ſlip a little from the body, and pricking with an aule about the joynt that is next the ſlip, from whence many ſprowts will iſſue. And thus may you have great ſtore of Province roſes without graffing in the bud,

becauſe each of them ſtandeth upon his owne roote; whereas the bud is maintained from one Roote, whch alſo maintaineth many other branches. *By S. See before in numb.* 53.

Good ſeeds to know.

65. Put ſome of your ſeeds in a ſawcer of faire water, ſet it a while upon a Chafingdiſh of Coales; and if they be good, they will ſprowt in a ſhort time, elſe not.

Seeds to ſprowt ſpeedily.

66. *Quære*, In what time ſeeds may be made to grow in earth, moyſtened with warme water now and then, and the ſame placed in a warme roome, over a Fornace, with a ſmall temperate heate under the ſame.

67. Re-

67. Remove a Plant of ſtock gilliflowers when it is a little woodded, and not too greene, and water it preſently; doe this three dayes after the full, and remove it twice more before the change. Doe this in barren ground, and likewiſe three dayes after the new full Moone, remove againe; and then remove once more before the change: Then at the third full Moon, *viz.* eight dayes after, remove againe, and ſet it in very rich ground, and this will make it to bring forth a double flower; but if your ſtock-gilliflowers once ſpindle, then you may not remove them. Alſo, you muſt ſhade your

Single flowers doubled.

plant with boughs for three or foure dayes after the firſt removings; and ſo of Pinks, Roſes, Dayſies, Featherfew, &c. that grow ſingle with long ſtanding. In removing, breake not the leaſt root. Make Tulipees double in this manner. Some think by cutting them at every full Moone before they beare, to make them at length to beare double. *Num:* 71.

Tulipee double.

68. By ſitting upon a hill late in an evening, neere a Wood, in a few nights a fire drake will appeare; marke where it lighteth, and there you ſhall finde an Oake with Miſletoe therein, at the Root whereof there is a Miſtell-childe, where-

Miſletoe to finde.

whereof many ſtrange things are conceived. *Beati qui non crediderunt.* Miſelchild

69. Gather your Grapes at the full of the Moon, and when they are full ripe, ſlip each bunch from the ſtocke whereupon it grew, and hang thoſe bunches along by beames, in the roofe of a warme chamber, that doth not open to the Eaſt, or to the North, and theſe will keepe plump and freſh till our Lady day, or thereabout: or elſe with every bunch, cut off ſome of the ſtock whereupon the ſtalke grew, and then hang up the bunches. Both theſe wayes be true; *By* S. Grapes kept long. See after in *Num.* 82

70. Make a little ſquare or round hole in a Tree, or in Flowers in Trees.

in ſome great arme thereof, of halfe an inch, or an inch deep, fill it with earth, ſow therein ſome Roſemary ſeeds, Wall-flower, Carnation, or other ſeeds; and theſe will grow firſt in the earth, and after root in the ſap of the Trees, and ſeeme in time as if they were graffed.

Stock-gilliflowers to continue.

71. Remove both double and ſingle ſtock-gilliflowers, when they are halfe a foot high, and then they will ſtand ſix or ſeaven yeares: whereas otherwiſe they will decay very ſpeedily: *See before, Num. 67.*

To remove rooted plants.

72. If you remove any rooted plants of Hearbe or flower, though it be ſomewhat forward in the Summer,

mer, ſo as you do it in the evening, after the heat is paſt; and plant it preſently, and water it, there is no danger of the parching heat of the ſun the next day. But in any caſe heave up the Earth with the Root carefully, ſo as you do not breake the leaſt ſprigge of any root; for then the ſap goeth out of the Plant, and it periſheth. This way you may recover great Gilliflower rootes, and others, without danger; by S.

Roſes to bear twice.

73. Cut your Roſes, after they have done bearing, ſo ſoone as the Moone will give you leave, *viz.* the fourth, fift, or ſixt day after the change, and ſo you ſhall have ſtore of Roſes againe about

about Michaelmas, or after. Take heed you cut no branch of a Roſe ſo low, as that you leave no leading branches upon it: for that will hinder the bearing of the Roſes exceedingly. It is alſo good in the after-ſaid dayes after the change, to cut any Hedge, Arbour, &c. to make it grow the better: *By* S.

Hedge and Arbour when to cut.

Early Peaſcods.

74. If you would have Peaſcods before all men, ſow the early peaſe in Auguſt, three dayes before the full Moon, or within ſix dayes after, and theſe will come very early; *By* S.

Gilderland roſes.

75. How to plant the Gelderland roſe, ſee among *Trees and Plants*, *Numb:* 119.

76. How

76. How to have Onion ſeeds, Annis ſeeds, and other ſeedes, to keepe full and plump, ſee among *Trees*: Numb: 135. Seeds full & plump.

77. Sow at every wane before Midſommer, to have Radiſhes unſeeded, and one under another; but at Midſommer wane ſowe Radiſh, Spynage, &c. but once, to grow till winter unſeeded; Proved by *Tomkins* the Gardner. Radiſh & ſpinage.

78. The double Piony, and Flowerdeluce, will grow of their own ſeed. By *Tomkins*. Piony and Flowerdeluce.

79. Lime beaten to powder, and mixed with corne before it be ſowen, preventeth Rookes, and other fowle, from devouring the ſame. Seeds from devouring

ſame. By my Couſin *Mathews* of *Wales*; *Quære*, If it do not alſo help to enrich.

Grapes kept long. Prove this in cheries, cluſters of raiſins, figs.

80. Gather your Grapes, *as before, num.* 69. dry them in a ſtove, till the faint water be ſpent, and ſo you may keep them all the yeare for your table. *Quære*, If they will not plump up againe at any time in warm water. *Quære*, of drying all manner of apples, plummes, peares, &c. this way, for lafting. *Before numb.* 69.

Strawberries large.

81. As ſoone as your Strawberries have done bearing, cut them down to the ground; and as often as they ſpire, crop them, till towards the Spring, when you would have them to proceed towards bearing: now

now and then as you cut them, ſtrew the fine powder of dryed Cow-dung (*quære* of Pidgeons dung) upon them, and water them when there is cauſe. Field ſtrawberries, this way, will grow two inches about in bigneſſe, as I am credibly enformed. Enrich Carnation pots this way.

After in Num. 85.

82. To water your pyramides, pentagons, globes, beaſts, &c. made of wood, or lead, and overgrowne with hearbes, *as before in num. 56.* let there be placed a long and large pipe of Lead, or tinne plate, reaching from the bottome to the top; let the bottome be ſodred up, and let it have divers holes in the ſides, at a rea-

Watering artificiall.

reasonable distance: then have an exceeding large funnell of tin plate, to let in to the pipe at your pleasure to receive so much raine as will water the same sufficiently; and when it raineth not, you may also water thereby with some rain-water kept of purpose.

Arbour aloft.

83. *Quære*, If Pompions planted in large pots, will not grow and beare fruit: for then you may have an Arbour of them in an open tarras, leades, or gutter, having a frame to support the fruit. Enrich the earth; as before, *Numb.* 83. now and then, to nourish the plant the better.

Musk-Mellon to prosper.

84. *Quære*, If Musk-mellons will not grow, and bear

beare in ſuch pots, for ſo in a Leads or tarras, the ſunne will ſhine ſtrongly upon them; and you may defend froſts and cold winds by ſtreining of canvas: water the pots with raine water put into other pannes, wherein you may place theſe pots when you want raine.

85. Cut your Roſes when they are ready to bud in an apt time of the Moon, and they will begin to bud, when other Roſes have done bearing: this is an excellent ſecret, if froſts happen in budding time: for ſo may you have ſtore of Roſes, when others ſhall have few or none, and may then be ſold at a high rate. This

Roſes late.

This I proved the 18th. of March 1606. being a few dayes after the change, upon divers ſtandards at *Bednal-green*, being extreamely nipped with froſts, in budding time; and many of them did yeeld me great ſtore of Roſes, when the reſt of my Garden did in a manner fail.

Store of Roſes.

86. Cut your Roſe-ſtandards in the twelve dayes, and not before: ſo they will beare exceeding well. *Proved often by Garret* the Apothecary, and *Pigot* the Gardener.

Flowers from froſt.

87. Towards Winter, new earth your Gilliflowers, Carnations, and ſuch other flowers as you would defend from the violence of

of Winter; then whelme carnation pots that are bottomleſſe upon them, or having a great hole in the bottom: and by this meanes, neither the ſharp windes, nor the froſt, can eaſily pearce to their roots. I hold this to be a good courſe for the defence of Artichokes in Winter.

Artichocks from froſt.

88. You may keep bunches of Grapes that are ſound and well gathered, in ſtone pots, covering them carefully, with ſand.

Grapes kept.

TO chooſe ground for a Hop-Garden, you muſt be ſure it bee not a moriſh or wet ſoyle (though ſuch perhaps may content a wild Hop) but a dry ground, if it be rich, mellow, and gentle, is abſolutely beſt. Yet a light mold (though never ſo rich) is unapt for this purpoſe, for the heavieſt ground will bear the greateſt weight of Hops. Place your Garden ſo as the Sun may have free acceſſe to it, either all day, or warmeſt part of the day. It muſt be guarded alſo from the wind, either naturally defended by hills, which is beſt; or artificially by Trees: but your Trees muſt ſtand aloofe, leſt the ſhadow of them reach the Hops, or drop wet upon them, which will deſtroy all. About the end of *March*, or beginning of *April*, take your roots from ſome Garden where they are yearly cut, and where the hills are raiſed high (for there the roots will be greateſt) let each root be nine or ten inches long, let there be three joynts in every root, and of the laſt yeer's ſpringing; but be ſure no wild hops cumber the ground, which cannot be diſtinguiſhed by the root, but by the fruit, or ſtalk. *Se-*

Secrets in the ordering of Trees and Plants.

DOgs and cats applyed to the roots of trees before the ſap riſe, have recovered many old decaying trees, ſhred them. Dogs and cats to the roots.

2. Divers waies for the enriching of a ground, whereof to make an Orchard, ſee among *Flowers. Numb.* 1,2,3,4,5. Rich ground.

3. Gravelly ground is to Ground enriched.

be dunged with chalk, and chalky with gravell, for lack of dung. T. T.

Box tree planted.

4. Strip away the leaves from the boxen ſlippe, and winde not the ſtemme, but ſet it whole without winding. T. T.

Bayes to plant.

5. Every ſlip of a bay tree will grow: ſtrip off the great leaves, and ſet them in March, when the ſappe beginneth to riſe.

Eldern to plant.

6. Every plant of an Eldern will grow. T. T.

Ground enriched.

7. Sand enricheth a clay ground; and clay a ſandy ground.

Poplar to grow.

8. Every ſlip of the Poplar tree will grow.

Trees to buſh in the top.

9. All Trees which you would have to grow thick at the top, and to buſh there

there, cut or proin them in *May*: for they ſpring more in *June* and *July*, than all the yeare before or after.

10. Plant Cherries in *October*, *November*, *January*, and *February*. T.T.

Cherries when to plant.

11. Plant Quince Trees in *October*, *November*, *February*, and *March*. T. T.

Quinces when to plant.

12. Set Haſells and Peare Trees in *October*, *November*, *February*, and *March*. T.T.

Haſels and Pear trees when to plant.

13. Set Apple cornells evermore the end that is next the root downward, five fingers breadth between every cornell; moyſten them often with water by ſprinkling, and ſet the cornells in *March*. T.T.

Apple cornels ſet.

14. Set plumſtones in November, ſix or eight inches

Plumſtones ſet.

ches deep in the earth. T. T.

Pineapple cornels set.

15. Set the Pineapple cornel (first steeped in water three dayes) in *October*, *November*, *February*, and *March*, four inches deep.

Peach stones set.

16. Set Peach-stones the sharp end downward, in *November*, four or five inches deep. T. T.

Springs & Plants set

17. Set springs and plants in harvest.

Branches to root in the ground.

18. If a Plant put forth many stalkes or branches from the root, and you would have each branch to root, then bear up the earth about them to some reasonable height, either with tiles or brickbats; and in that earth, every branch will root. (*Quære*, if your branch will root at any part

part but in a joynt, about the which alſo, with a great aule you muſt pricke many holes even to the wood,) This is a neceſſary ſecret in all ſuch plants as be ſtraight and ſtiffe, and not apt to bow, or to be laid along within the earth. By Mr. *Pointer.*

Old tree or vine recovered.

19. How to recover an old decaying tree or Vine, with bloud, and pigeons dung, ſee among the *Flowers* Numb. 34.

Orchard of dwarf trees.

20. An Orchard of dwarf-trees, that may be defended from all froſts, ſee among the *Flowers*, Numb. 32.

Early fruit

21. How to have early fruit, ſee among the *Flowers* Numb. 33.

Fruit growing long.

22. Plant Dwarfe Trees, and when the fruit is almoſt ripe, bow down their branches with their fruit upon them, into great earthen pots, or pitched tubs, either with bottomes, or without bottomes, the pots or tubs ſtanding in the Earth; then cover them with boards and earth from the ſun, and the ſap of the Tree will keep them growing a long time, as I ſuppoſe. Prove this in greene fruit, ripe fruit, and almoſt ripe fruit; alſo in the blooming time, if you fear froſts bow downe the branches with the bloſſoms, as before to defend them in *May*, from the injury of the weather: and by this help you may

Bloſſoms frō froſts.

may happily have Fruit, when others ſhall want.

23. Put a Vine branch thorough a baſket in *December*, chuſe ſuch a one as is like to beare grapes; fill the baſket with earth, and when the Grapes are ripe, cut off the branch under the basket: keep the basket abroad, whilſt the weather is warme; and within doors in cold weather, in a convenient place: Prove this in plummes and cherries, &c.

Grapes growing long upon the Vine.

Plums and Cherries growing long.

24. Make divers holes with a croe of iron, round about the bodies of your Trees; and about Alhallontide, pour Oxe bloud into the holes, cover them with earth, and this will make your

Trees to proſper.

your trees to proſper well.

Apricots to proſper

Probatum in Apricot trees, By Mr. *Andr. Hill.* If you do this at the Spring, the ſmell of the bloud will offend you; and therefore this practice is beſt for the Winter ſeaſon.

Speedy woods.

25. Plant the ſhoots of Sallow, Willow, Alder, and of all ſwift growing trees, being of ſeven yeares growth, ſloping off both the ends one way, and laying the ſloaped ends towards the ground, let them be of the length of a billet, bury them a reaſonable depth in the ground, and they will put forth ſeven or eight branches, each of which will becom a tree in a ſhort time. I take moyſt grounds

grounds to be beſt for this purpoſe: thus you may have ſpeedy growing woods.

Branches to root.

26. To make any branch of a tree to root, ſee among the *Flowers*, numb. 45.

Trees frō Barking or canker.

27. Mixe green Cowdung and urine together, waſh the trees with a bruſh ſo high as you think meet, once in two or three months, and it will keep the trees from barking with beaſts, conies, &c. and the ſame doth alſo deſtroy the canker.

Rich mold for Orchard or Garden.

28. Take of the rich cruſt of one acre of ground, and therewith you may make any Garden, or Orchard ground, that is but a foot deep in goodneſſe, of what

what depth you pleaſe to make the rootes of your trees to proſper the better.

Depth for trees.

29. In high grounds and ſandy, ſet Trees deepe: in low grounds, and watry, plant them ſhallow; the ſhallower the better. By Maſter *Hill*. But by *Taverner*, you muſt ſet your Trees ſo, that the rootes may ſpread in the upper cruſt, which is the fruitfull part of the earth. This cruſt in ſome grounds is two foot; in ſome three foot; in ſome one foot; and in ſome but halfe a foot deepe: ſee the reaſon more at large, in his booke, page 34.

Proining o' trees.

30. Lop, top, and proin all Trees in *January*, in the wane of the Moone, and pare

pare them over in *March*: ſo ſhall the bark cover his ſtock the ſooner.

31. Slit the barke of all Trees that are bark bound, in *February*, or *March*, in the increaſe of the Moon. Trees baak-bound, helped.

32. Refuſe to graffe, plant, remove, lop, top, proin, to ſlit the barks of trees, or ſet or ſow cornells, nuts or ſtones, in weather froſty or watry, and when the wind ſhall be Eaſt or North, or North-eaſt. Yea, the beſt Oake felled under ſuch a winde, will prove but wind-ſhaken timber. Ill weather for Orchard works. Oak when not to be felled.

33. Small Crabſtock of three inches about, or leſſe, may be graffed. Bigneſſe of crabſtock.

34. Peare ſtocke, and white thorne ſtockes of the ſame Bigneſſe of Pear ſtock and white thorne.

ſame ſcantling, all of them about the length of twelve or twenty four inches.

Bigneſſe of wild chery ſtocks.

35. Wild cherry ſtocks, three, four, or five foot long and three inches about, little more, or leſſe.

White plum-ſtocks.

36. White plumſtockes would be of the ſame bigneſſe.

When a ſtock is to be graffed.

37. When the ſtocke is able to put forth in one yeare a ſhoot of a yard long, then is it of ſtrength ſufficient to bear a Cions; for then it ſheweth to like the ground well; otherwiſe, it will never prove a fair tree.

White thorn no ſtock for peare or warden; good for a medlar.

38. A Peare or Warden, graffed upon a white thorn, will be ſmall, hard, cappard, and ſpotted; but a Medlar may well be graf-

ted

ted upon a white thorne. *Taverner.*

39. The ſuckers of Quince trees, and Filberds, will prove well being planted. *Taverner.* Suckers planted.

40. For Cheſtnuts and Wallnuts, ſet the nuts onely. *Taverner.* Nuts ſet.

Rules for inoculation, or graffing in the bud.

41. IF you graft in the bud, be carefull to cloſe the ſame well in the bottome of the ſcocheon; for there the ſap riſeth that maketh it to take. By *Andr. Hill.* 1 Cloſe well in the bottom.

42. From the eight of *June* until the 24 is the beſt time 2 Time of grafting.

time to graft in the bud in plums and cherries, but ſpecially in Apricots; but the ſureſt rule is to do this work when you find the bark to come eaſily from the body.

3 Inſtrument to graft with.

43. Two parts of three in a Gooſ-quill taken away in breadth, is an apt tool to take off a bud withall, without danger of hurting the bud. By Maſter *Pointer*. Some commend a tool of Ivory; ſome do onely ſlip off the bud and the bark together.

4 Loſenge-wiſe.

44. Graffing, by taking off a bud loſenge wiſe, and ſetting the ſame in another like place upon a ſtock, is good. By Maſter *Pointer*. This is done at ſuch time,

as

as is fit to graft in the cions.

45. When your bud takes, then in March after, cut off all that groweth aboue it, ſtripping away all the buds that put forth: and that which remaineth ſerveth to leade up the branch of the bud to keepe it ſtraight, and to defend it from breaking with the wind. 5 What to do when the bud taketh.

46. If you graft two or three buds upon one tree, and they all do take, maintaine onely the loweſt, and preſerve and ſtrengthen the ſame with ſome neither branch, as before in *num.* 45. 6 The loweſt bud maintained.

47. A Cherry proſpereth well upon a Plum ſtocke; but not *e contra*: and there- 7 A cherry upon a plum tree.

fore, if you graft a Cherry in the bud upon a branch, or bough, of a Plumtree that doth beare, you may make the ſame Tree to bear both Plums and Cherries. *Proved by* Mr. *Hill.*

8 Grafting compaſſes.

48. A pair of Compaſſes made flat at the ends, and ſharp with edges, is an apt inſtrument to cut away the bark for inoculation, both for a true breadth and diſtance all at once. And ſo likewiſe with the ſame you may take off the bud, truly to fit the ſame place again in the ſtocks ſome Compaſſes are made flat at one end, and ſharp at the other.

9 Gelly preſerved in the ſtock.

49. You muſt have care in this grafting, not to hurt or bruiſe the gelly next the ſtock

ſtock which muſt miniſter ſap to your bud.

50. Alſo when you have taken off your bud, clip the ſides of the bark whereon the bud ſtandeth, with a pair of Sciſſors, very even, in a ſquare form; or rather ſomewhat longer then broad: for if you cut the Bark at the ends with a knife, laying the inſide upon any board, you will hurt the gellie in the inſide, and then the bud will never take.

10 Gelly in the bud preſerved.

51. Make the place ready for inoculation, and remove not your bud before you mean to place it, for taking of too much ayre.

11 Bud to take no ayre.

52. When you have cut down the bark on either

12 How to ſlit the bark.

ſide, and likewiſe at the top, leave the bottome of the barke whole, and then ſlip down the bark; and betweene the barke and the Tree, put in the bud, and bind the looſe barke of the Tree upon your bud, and by this meanes your grafting will take more certainly. The leſſer your ſlit is, and the cloſer that your bud fitteth the ſlit, it it the likelier to take.

13 What buds are beſt.

53. Take off your bud from a ſprig of the laſt years ſhoot, for that is beſt for this purpoſe; by Mr. *Andr: Hill.*

14 How to ſlit the bark.

54. Make an overthwart cut at the bottom, and then begin your ſlit upward, putting up your bud from the

the bottome of yonr ſlit, cloſing well at the bottom, This is contrary to the common courſe, which beginneth at the top, with a ſlit downward.

Graffing of a Cions.

55. A Tool of Ebony, or Box, is better to open the bark than a toole of Iron, if you would graft a cions betweene the bark and the tree. By Maſter *Pointer*: for *Mars* tainteth the ſap preſently. 1 Grafting tool

56. Grafting whipſtocke wiſe, and letting in the cions into the ſtock by a ſlit, is good for young Trees, that ſpring upot ſtones, or pip- 2 Splicing way.

pippins, being of theee of foure yeares growth, and not above. Some call this the ſplicing way.

3. Cleaving the body.

57. Grafting upon a old tree, by cutting off the head, and one inch from the center by ſtriking in a ſmall iron wedge, and as it cleaveth by following the ſame with your knife; and ſo on either ſide, placing of a cions, ſap to ſap; this is a way of grafting uſed by Maſter *Pointer* of *Twicknam*.

4. Low grafting.

58. Graft within a foot of the ground, if you would have the fruit to grow low, and eaſie to be gathered: and this is alſo thought a fit way to make your cions to take, becauſe the ſap riſeth ſpeedily to the cions.

59. Graft

59. Graft your cions on that ſide the ſtock, where it may take leaſt hurt with the ſouth-weſt wind (becauſe it is the moſt common, and the moſt violent wind that bloweth in the ſpring, and ſummer:) ſo as that wind may blow it to the ſtock, and not from the ſtock. 5 On which ſide to graft.

60. If you would have faire and kindly Cherry trees, ſet the ſtones of Cherries, of the ſame kind as your bud or cions is of, and at three or foure yeares, you may graft thereon, according to the manner, ſpoken of before, in Numb: 57. *viz.* great Cherries, upon ſtocks that carry great cherries. 6 How to have large Cherries.

91. Some think it good, that 7 What cions is beſt.

that your cions have some of the former yeares shoot with it, that it may be the stronger to graft, and abide to be put close into the stock; and perhaps it will forward the sam in bearing.

8 Cions put in close.

62. It is the best way, to put in your cions in the graffing as close and straight as you may: neither are you here to fear the pinching of the stocke, unlesse it bee where you graft in a deepe clift of a large body.

9 The cions made the stock.

63. So likewise you may graft, upon a bearing bough of an Apple tree, a contrary Apple; and when that cions is growne great enough to receive another graft, you may graft a contrary fruit thereon; but an Apple cions doth

doth not agree with a Peare ſtocke, (not *e contra*) nor a Plumme upon an Apple or peare ſtock, neither will any Cions of a Fruit Tree take upon an Elme ſtocke; proved by Maſter *Hill*.

Upon what ſtock to graft.

64. A Quince may well be grafted upon a Medlar ſtock: and a Medlar will grow, but not proſper ſo well upon a Quince ſtocke, becauſe the Cions will outgrow the ſtocke; proved by Maſter *Hill*.

10 Quinces upon a Medlar.

65. Unleſſe the uttermoſt rind or barke of your ſtocke be very gentle and thin, it is beſt to ſlit the ſame along: but hurt not the innermoſt barke when you graft between the bark and the tree By Mr. *An. Hill*.

11 Bark when to ſlit.

66. Be-

12 Preparing the cions.

66. Before you graft your cions, take away a little of the uppermoſt barke on either ſide the edge, but hurt not the greeniſh part.

13 When to graft deep.

67. If your bark and cions are both ſtraight, then may you graft the deeper into the ſtock, *viz.* foure inches, and that is a very ſure way to make the Cions to take, ſo as you joyne ſap to ſap well; but if either the ſtock or cions be crooked, then two inches are ſufficient. By Mr *And: Hill.*

14 Grafting at Chriſtmas.

68. You may graft an Apple cions at *Chriſtmas*, ſo as you graft the ſame very deepe into the ſtocke, *viz.* four inches, or three at the leaſt, and cloſe it well: for, though the ſap riſe not, yet the

the moysture of the ſtock is ſufficient to preſerve the cions, untill the ſap do riſe; proved by Mr. *And: Hill.*

69. Long Moſſe, well bound about the head of your ſtock and of an inch or more in thickneſſe, is ſufficient alone to keep out both wind and water from the ſtock where the cions is let in. This muſt be repaired again at Midſomer. 15 Graft bound with moſſe

70. Cloſe your Cions with red or green wax, having a little butter therein about the ſlit: and this both keepeth out the wind, and maketh the ſap to creepe under, and cover the ſlit the ſooner. 16 Cloſing the cions.

71. A peach may well be grafted or inoculated in a 17 Peach upon a plum ſtock

a plumme ſtocke, and will thrive better then upon his own ſtock.

18 One tree let into another.

72. If two Trees grow together, that be apt to be grafted one into another, then let one branch into an other workmanly joyning ſap to ſap.

19 Length of a cions.

73. If you have three or foure good buds next the foot of the cions, that cions is long enough to be grafted; and ſo you may make divers cions of one branch, where you cannot get plenty of cions.

20 Artificiall wax to cloſe with.

74. Cloſe all your inciſions upon ſmall and young ſtocks, with a mixture conſiſting of green wax, or red wax: and if your wax be old, melt the ſame, and adde

adde ſome freſh turpentine thereto, or elſe you may uſe pitch inſtead of wax, adding Turpentine: but let there be alwayes in your wax, one fifth, or one ſixth part of butter, to keep the ſame ſupple; and when you have applyed this ſalve cloſe to the joynts, then ſtrew thereon the fine powder of dryed earth, which you muſt have alwayes ready; and that keepeth it hard in the ſun-ſhine: This is the onely compoſition to make the bark to cover the ſtock. You muſt firſt after your grafting, binde the ſtock and the cions together, with the bands of Brawne, and then lay your tempered wax thereon; and

and if the band continue whole, you ſhall cut it in ſunder about *Auguſt* following; by *Andr: Hill.*

21 How to carry a cions far.

75. You may carry your cions in this manner, a long journey without endangering them: Firſt, wax over the ends with the artificiall wax, (mentioned before in Numb: 74.) then role them up in great ſtore of greene Moſſe moyſtened, and tye them, and then put them into a caſe or box of wood, and ſo carry them; By *And: Hill*: You may keep a cions fourteen dayes or 3 weekes in grafting time, ſo as it be done before March, by ſticking the ſame in your window. onely; yet ſome will have the ends of them dipped

dipped in the compounded wax, as before in *Numb:* 74.

76. Alwayes be carefull when you graft upon your ſtocks the ſplicing way, that your ſtocke be of as large a kind of fruit, or larger, then the Cions, or elſe it will not be able to feed the Cions: or elſe you muſt graft upon larger ſtocks, if the cions be of a large fruit, and the ſtock but of a ſmall fruit. 22 Upon large fruited ſtocks.

77. Plant an Apricot in the midſt of other plumme Trees round about it, at a convenient diſtance; then in an apt ſeaſon, bore thorough your plum Trees, and let in to every one of them, one or two of the branches of your Apricot tree, thorough 23 Many Apricot Trees of one.

rough thoſe holes, taking away the barke on both ſides of your branches which you let in, joyning ſap to ſap, and lute the holes up with tempered loame; and when they are well knit, the next year cut off the branch from the Apricot Tree: and ſo you have gotten many Apricot Trees out of one. Take away in time all the head of your plum Tree, and all other branches maintaining onely that which is gotten from the Apricot. But ſome commend rather the leting in of a branch of one Tree, into the other, worknanly, for the more certaine kinde of grafting.

24 Obſervation in ſtock.

78. Plant every ſtocke with

with one leading branch, at the leaſt, to carry up the ſap: and after your ſtocke hath growne one year, and maketh good ſhew of liking the ground, then graft your cions upon it, leaving one or two leaders; but none ſo high as to overtop your cions: and when your cions is well taken, then cut away your leaders, and all other ſpires; and ſo your cions will proſper exceedingly. By *Andr. Hill.*

25 Heading of ſtocke, and grafting after.

79. Some hold opinion, that if when others begin to graft in the ſlit, you doe then cut off the head of your ſtock, leaving one branch near the head to lead the ſap, and then after cold weather is all paſt, if

you graft in the ſlit, that ſo your ſtock and cions will proſper far better, then if you had grafted the ſame in the ſlit at the firſt. By *Andr: Hill.*

But then yon muſt remember to take away the leader, that the ſap may more plentifully feed the cions.

26 When to cut down a cions.

80. Some doe cut off all their cions in the Winter, *viz.* eitheir in *November*, or *December*, and then lay them in earth; and in the new Moone of *March*, or *Aprill*, they graft them, and they prove exceeding well; perſwading themſelves, that no knife is ſo ſharpe, but that it will hurt the barke or gelly of the cions, if the cions

cions ſhould be cut downe when the ſap is up. This of Mr. *Colborne*; who commendeth this courſe, upon long experience. And if you graft thoſe cions upon ſuch forward trees, as have put out their ſap very plentifully, they will proſper exceeding well; becauſe being hungry, and almoſt ſtarved for want of nourifhment, they take hold of the ſap that ariſeth from the ſtocke, very eagerly.

Upon what ſtock to graft.

81. Note, that your ſtocks may put forth buds, yea, ſmall leaves; and yet you may ſafely graft upon them.

27 Stocks when to graft.

82. If you would have your ſtocks of your young

28 Stocks to proſper

grafted Trees to proſper, and grow exceedingly, then ſuffer the water-boughs to grow up with the ſtock, till the bodies be as big as your arme, and then prune them at your pleaſure; for by this meanes the ſap doth riſe more luſtily, when it hath many branches to draw from the root.

29 Late grafting, yet with advantage

83. You may graft in the Cions, a Moneth after other men, and yet have a longer ſhoot than they, the ſame yeare, in this manner: Cut off the head of your ſtock when other men do (which many times falleth out to be in very cold weather) then cover your ſtock over with your artificiall wax, (as

(as before in *Numb.* 74.) and one moneth after, or when all cold weather is paſt, crop your ſtock one inch lower, and then graft your cions; and then (cold weather being paſt) the ſap will riſe very plentifully to maintaine the cions. *Proved by* Maſter *Andr. Hill.*

84. Graft not upon any young ſtock, till it be able to put forth a ſhoot of a yard long in one yeare (which ſometimes will not happen, till it have been of two or three years growth) for till it put forth abundance of ſap, it will never feed the cions ſufficiently. *Proved by* Maſter *Andr. Hill.*

30 When to graft a ſtock.

85. The ſtocks of black Cherry Trees, are beſt to graft

31 Stocks for great cherries.

graft the great Cherry upon; proved by Mr. *Colborne*.

32 Store of stocks.

86. To have your Nursery full of stocks to graft on, sow the stampings of crabs; which are commonly full of Cornells; By Mr. *Kirwin*.

33 Ground for a Nursery.

87. Let your Nursery consist alwayes of a more barrain ground then your Orchard, whither you meane to remove your stocks and grafts. So likewise, if you transplant any Fruit trees, bring them alwayes from a worse ground to a better, or else they will never prosper.

A rule for transplanting of Trees.

34 Stocks stopped.

88. Slope your stockes which you meane to graft on, like Colts feet before you graft them: for so the bark

bark will cover the ſooner, and the raine ſhooteth from the ſtock the better. *Proved by Maſter Colborne.*

89. If you would have your graft to beare quickly, one ſpeciall help is, to take it out of a bearing branch. 35 Cions to beare quickly.

90. At the beginning of the yeer, and before the ſap doe riſe, you may graft in the body of the ſtock, or by way of ſplicing upon every little branch of your Tree (but alwayes remember to take off the top of your cions, having any leaves upon it:) when the ſap is up, then you muſt graft betweene the barke and the ſtock; and then the ſap is ſo plentifully riſen, that the 36 The times of ſeverall grafting.

the barke will easily pil from the body, then may you graft in the bud, or leafe. How to graft at *Christmas*, See before in *Numb.* 69.

37 Plants upon trees

91. To graft Roses, or hearbs upon trees, *see among the Flowers*, Numb. 49.

38 Fruit without stones, and hidden with leaves.

92. Graft the small end of the cions downward; and so of pears and apples; and they will have no coar. *Quære*, of plummes grafted upon a Willow, to come without stones. Also, such apples and pears thus grafted, will for the most part hang under the leaves, and not be seene, unlesse you come under the trees: By S.

39 Apricot grafted.

93. A grafted Apricot is the best: yet from the stone you

you ſhall have a faire Aprieot, but not ſo good; and the grafted is more tender then the other. By S.

40 A large Medlar.

94. Graft a Medlar upon a Quince, and it will bring a faire and large Medlar. By S.

41 A pippin upon what ſtock

95. A cion of a pippin, grafted upon a crab-ſtock, is more kindly, and keepeth better, without touch of canker, then being grafted upon a pippin. By Mr. *Simſon.*

Why trees tranſplanted doe alter.

96. Trees that bear early, or often in the yeare, as Peare Trees upon *VVindſorhill*, which beare three times in a yeare; theſe, though they be removed to as rich, or richer ground, yet they do ſeldom bear ſo early, or ſo

so often, except the soyle be of the same hot nature, and have the like advantages of situation, and other circumstances, with those of *Windsor*. And therefore commonly, the second fruit of that Pear tree being removed, doth seldome ripen in other places. By Master *Hill*.

Colour, sent, or taste altered.

97. All those fantasticall conceits, of changing the colour, taste, or sent, of any Fruit, or Flower, by infusing, mixing, or letting in at the bark, or at the roots of any tree, hearb, or flower, of any coloured, or aromaticall substance, Master *Hill* hath by often experience sufficiently controlled: and though some Fruits and flowers,

flowers, ſeeme to carry the ſent or taſte, of ſome aromaticall body, yet that doth rather ariſe from their own naturall infuſed quality then from the hand of man.

98. Some do never graft betweene the bark and the tree, but in old ſtocks.

Graft between bark and tree.

99. Lop the branches of your trees alwayes in Winter, before the ſap doe riſe within ten or twelve inches of the trunk; and in the Spring, when the ſap is up, cut thoſe branches cloſe to the trunk: And ſo ſhall you both have your tree luſty, becauſe no ſap is left in thoſe vaſt branches (which would have beene loſt, if you had proined them according to the uſu-

How to lop.

all

all manner, in March, or Aprill) and alſo the ſap will then come purling out, and ſoone cover the Wood; whereby you ſhall avoid thoſe blemiſhes in your trees, which others procure by proining them in the Winter. By Maſter *Andr. Hill.*

To have green trees in winter.

100. *Quære*, what hearbs, flowers, or branches of trees, may be grafted upon the bay or holly tree, or any ſuch tree as keepeth green to Winter, to make them alſo carry green leave in Winter.

Orchard ground to order.

101. Pare your ground with a ſhod ſhovell, ſo often as any graſſe or weedes begin to put forth, both in your nurſery and orchard; and

and ſo ſhall you both keepe the ground mellow, and the raine ſhall have better paſſage unto the roots of your trees. By Maſter *Pointer*; who keepeth Conies in his Orchard, onely to keepe downe the graſſe low, becauſe otherwiſe it would be very chargeable. Alſo, in Vineyards, the uſe is to turne up the ground with a ſhallow Plough, as often as any graſſe offereth to ſpring: but I thinke, that prevention of graſſe, both in Orchard and Vineyard, is much better, if in were not too coſtly.

Vineyard to order.

102. Upon the *Epiphany*, by reaſon of a great ſtorme, an Apple Tree, that had not beene very fruitfull before, was

Tree rooted higher See after in 106.

was almoſt blowne up by the roots at *Hackney*; and after with Ropes it was drawne upright, and the what mounted, and the Root covered with earth; and that Tree, the next Sommer, bare an exceeding great burden of fruit.

Wreathed bodies of trees.

103. When your Apple Cornells are of two yeares growth, then ſet a long ſtraight ſtick by each of them, winding the young ſtocke about the ſtick; by little and little as it groweth, and faſtning it with bands under the ſtick, and ſo it will grow in a wreathed form.

Fruit enlarged.

104. *Quære*, If nipping off the new and tender tops about bloſſoming time will

will not make ſommer fruit trees to bloſſome ſpeedily, or to enlarge the fruit.

105. If an old Tree that is ſpent, and hath done bearing, be underpropped, ſo as the body ſink not, and that the earth be after taken away from under all the roots, and inſtead thereof, good rich mold be conveyed into the void places, that ſo an old tree will floriſh againe, and beare fruit. *See before in* Numb. 103.

Barren trees to beare.

106. The Lord *Zouch*, in Winter, in the yeare 1597 (and Maſter *And. Hill*) thinketh moiſt weather is beſt, that the earth cleaving to the roots, may be alſo removed with them, the earth being faſt bound with

Tranſplanting old trees.

with Fearn branches to the roots) removed diverſe apple trees, damſon trees, &c. being of thirty or forty years growth, at *Hackney*: the earth was digged in a good large compaſſe from the roots, the roots little hurt; holes were prepared for each tree before hand, enriched with freſh and good earth; the branches and tops taken off almoſt cloſe to the trunk; and they were planted again in the ſame hower wherein they were removed; and the roots placed towards the ſame point of the compaſſe as they firſt grew. He had a few damſons the firſt year, and all put forth leaves at Michaelmas after, *anno* 1598. Blood

107. Blood laid at the roots of old Vines, hath been commended for an excellent ſubſtance to harten them, unto Mr. *Andrew Hill.* Old Vines recovered.

108. If you cut any Vines when the ſap is up, preſently cover the place with good ſtore of Turpentine, and it will ſtay bleeding. Proved by Mr. *Melinus.* Some commend the ſtraight binding of a packthred about the bark thereof: ſome fear with a hot iron, and drop hard wax preſently upon it. Bleeding of Vines ſtayed.

109. By the opinion of ſome men, if outlandiſh fruit Trees be planted in *England*, they do ſtrive to put forth bloſſoms, and to Early fruits.

bring fruit at the ſame time with us, as they did in their naturall places, unleſſe the extremity of cold doe nippe or hinder them. And this ſeemeth to them to be the reaſon, why the Black thorne at *Glaſſenbury* Abbey, did uſe to bloſſome at *Chriſtmas*, becauſe happily the plant was brought from ſuch a climat, as where it did bloſſome at the ſame time of the year.

Wet Orchard helped.

110. If your Trees ſtand in wet grounds, ſome doe adviſe to lay lime on the face of the ground, to help the bearing of the trees.

The Cions to proſper

111. If whilſt you maintaine ſome ſuckers to your ſtock, (becauſe the ſtock is not yet ſo big as your arme) your

your Cions doth not proſper to your mind, then nip off the buds that grow upon the ſuckers, now and then in the midſt, till your cions thrive according to your owne deſire.

112. In proining of your Fruit Trees, or of any other ſhrub or plant bearing fruit you muſt alwayes have reſpect, whether it beare his Fruit upon the firſt, ſecond, or third yeares ſprowt; for you muſt never cut away all the bearing ſprowts, if you meane to have any Fruit. As, in Pippins, the third yeares ſprowt doth onely beare Fruit; and in ſome other Fruit Trees; onely the ſecond yeares ſprowts; in Gooſeberries, True proining

the laſt years ſprouts bear moſt, by Mr. *Andr. Hill.*

Timber to grow of any faſhion.

113. When your Trees are young, you may bow them to what compaſs you will, by binding them down with packthread to any circular form, or other ſhape that pleaſeth one beſt. And by this means your Timber will growe fit for Ships, Wheels, *&c.* whereby great waſte of Timber in time would be avoided.

Apricots to beare.

114. Mix Cow-dung and Horſe-dung well rotted, with fine earth and Claret wine Lees, of each a like quantity, baring the roots of your Trees in *Jan. Februarry*, and *March:* and then apply of this mixture to the

the roots of your Apricot Trees, and ſo cover them with common earth: by this means, ſuch Apricot Trees as never bare before, have brought forth great ſtore of fruit. Prove this in other Trees. This of Mr. *Andr. Hill.*

Peare, Warden, Peach, in what ground. How to uſe the roots in ſettings.

115. Pears, Wardens, and Peaches, delight in Clay grounds.

116. When you plant any Tree, preſſe not down the Roots together, with laying earth confuſedly upon them, but extend every branch by it ſelf, and cover it looſly with earth, according to that form wherein it did firſt growe. By Mr. *Colborn.*

Apricot, in what ground.

117. Apricots like well

in ſandy ground.

Dwarf trees.

118. Some hold opinion, that if one ſet the ſlips of an Apple Tree, and ſo of divers other Trees, that theſe will prove Dwarfe Trees. And ſo of the Tree that beareth a white flower as big as a Roſe, called the *Gelderland roſe*.

Gelderland Roſe.

Dwarf trees.

119. From May to the end of July, you may take off the bark from any bough of a Tree, round about the bough foure inches deep, if the bough be as large as a mans wriſt; or elſe a leſſe depth will ſerve. If the bough be leſſe in compaſſe cover the bare place; and ſomwhat above and below, with loame well tempered with Horſe dung, binding downe

downe the loame with hay, and brawn bands upon the hay: and ſo let it reſt till about Alhallontide: And then within two or three dayes of the firſt New Moon, cut off the bough in the bare place, but in any caſe cut not the green bark above it; and then ſet it in the ground, and it will grow to be a faire Tree in one yeare, according to the length of the bough. *Quære*, of watering the loam now and then. Yet in reaſon, me thinkes it a likelier courſe, to clap a gilliflower pot made of purpoſe in two halfes, with a great hole in the bottome, about ſuch an arme; and after you have bound the pot well with wier,

wier, then to fill it with good earth, which you may better water in dry weather, than you can do the lump of loam. You may also use a twig no bigger than ones finger, in the same manner. Yet some do rather commend the binding of the loam, or earthing the Tree, with a pot about it, without taking away any bark at all, but only pricking many holes with a great aule, in that part of the bark which is covered with the loam or earth. You must remember to underprop the pot, or else to hang it fast to the Tree. *Quære*, if a branch must not root at a joynt.

How to lop Elms.

120. If you cut off the top

top or head of an Elme, it will not leave rotting downward, till it be hollow, and doat within: but an Oake will abide heading and not rot. Alſo, the boughs or branches of an Elme, would be left a foot long, next to the Trunk when you lop them. This of an expert Carpenter.

Sappineſs to avoid.

121. To avoid ſappineſſe, fell both the bodies and the arms of Oaks and Elms in *December* after the froſt hath well nipped them: and ſo your ſaplings, whereof rafters, ſparres, *&c.* are made, will laſt as long as the heart of the Tree, without having any ſap. *By the ſame man.*

Young trees to grow.

122. Take off a thin turfe of two foot, round about each

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Young trees to grow.

122. Take off a thin turfe of two foot, round about each

each tree newly planted, cover the same with Fearn, Pease straw, or such like, a handfull thick: water your Trees once a moneth, if the weather prove dry, with dung water, or common water, that hath stood in some open pit in the sun. This keepeth the ground loose from baking; whereby the Tree will prosper the better, and put forth shoots of three and fourfoot in one year: remember you do not set any Tree above one foot deep, or little more, & give each Tree some props for the first yeare, that the wind shake it not too much. And yet some, of good experience, doe hold, that it skilleth not how much a young tree

tree be ſhaken (ſo as it be not blown up by the roots) and that it proſpereth ſo much the better.

123. Quinces growing againſt a wall, lying open to the ſun, and defended from cold windes, eate moſt delicately. This ſecret the Lord *Darcy* brought out of Italy. *quære*, of all other Fruits. Delicate Quinces.

124. Set Peach ſtones in a dry ground, where there is no water within three or four foot; for this tree hath one root that will run deep into the ground: and if it once getteth into the water the Tree dyeth. The ſtone bringeth forth a kindly Peach. Set Peach and Apricot ſtones in pots of earth, within doors in February; keep Peach and Apricot ſtones to ſet.

keep the earth moiſt, by wat'ring now & then; tranſplant them in *March* into your Orchard. By *S.*

Sap of tree to gather.

125. In the end of *March*, gather the ſap of the Trees within a foot of the ground: but take off the firſt bark, & then ſlit the white bark overthwart wiſe, even to the body of the Tree; but ſlit onely that part of the bark which ſtandeth South-weſt, or between South & Weſt, becauſe little or no ſap riſeth from the North, or North-eaſt ſide. After you have ſlit the Tree, open the ſlit with your knife, ſo as you may let in a leafe of a Tree, firſt fitted to the breadth of the ſlit; and from this the ſap will drop, as it doth

doth in filtration. Take away the leaf, and the bark will close again; earthing it with a little earth upon the slit. By *S.*

126. Cut away all the idle shoots of the last year, in your Apricot and Cherry Trees, before Christmas some three weeks, to make your fruit the fairer. Fair Apricots and Cherries

127. If you would stay the sap of Trees from rising, to make your Trees to blossom later, thereby to avoid frosts in blooming time, then hack crosse-wise, *viz.* overthwart the Tree, upon so much of the Tree as is within the ground, even down to the root, and then cover it again with earth. Hack it very thick, even tho- To stay blossoming.

thorough all the bark to the very Wood, in the new Moone three weekes before Chriſtmas, if they be Apple trees, pear trees, or warden trees: but for Apricots, doe this rather in the full of the Moone, next before Chriſtmas; but croſſe hack your cherry trees and peach trees in the new moon next after Chriſtmas: and ſo you ſhall have your bloſſomes, and by conſequence your fruit, come later then other mens doe, becauſe the ſap cannot riſe. I thinke you muſt alſo hack the maine root. *Quære.* By S.

Green trees in Autumne.

128. If you would make a tree in a ſhort time to caſt his leaves, and thereby to bring forth young leaves, which

which will laſt upon the tree freſh and green, when all other Trees have loſt their leaves; then croſſe hack the bark, cloſe to the wood about Midſomer. In all the croſſe hackings here mentioned, let every of them be halfe an inch, or thereabout, diſtant one from another; and every rank of hacks, one inch above another, or thereabout. Alſo, this practice to avoid the fall of the leafe, muſt be done but every ſecond yeare to any Tree, for fear of deſtroying the ſame.

Quære, if the Moon be here to be reſpected.

125. But if in January, or before the ſap doe riſe, you hack the body long-wiſe, and not overthwartly, and that only thorough the firſt bark,

Bodies of trees to enlarge. Bark-bound.

bark, and no further; this will make the bodies of your Trees to ſwell, and burniſh the better, to maintain their heads or grafts.

To kill Moſſe.

130. And if by overthwart hacking you would only kill the moſſe of Trees, then let your overthwart backs be thorow the bark, even to the wood: and this you muſt do between *Alhallontide* and S. *Andrews* day; *viz.* ſo ſoon as the leaves be off the Tree, both to avoid moſſe, and to make barren Trees to bear. You muſt make theſe hacks with the nether corner, or point of a ſmall hatchet, ſo as every notch may be about half an inch long: and hack the body the height of a man;

viz.

viz. one row of hacks, two inches below one another, all over the body: but let there be a distance between the overthwart hacks, so as they may not meet in a round ring, like a circle, about the tree: and by this meanes the uppermost bark whereon the mosse grew, will in time fall clean away, and the mosse with it, and the tree will gather a new bark. And though the tree be thus hacked but to a mans height, yet the tree will beare much better the next yeare. But when your leisure serveth, crosse-hack all the body in this manner, even to the trunk, as also a part of every great arme that groweth next the tree:

Note, that in ſeven years the Tree will bee bark-bound, and ſo moſſie again, as at the firſt: and therefore once in ſeven yeares you muſt renew this work. By *S.*

A Tree to root higher.

131. But if your tree bear not, becauſe it was planted too deepe at the firſt, then take away the earth from the body of the tree; and a little below the uppermoſt face of the ground, prick the body of the Tree clean thorough the bark, full of holes, with a pretty round aule or bodkin, of a reaſonable bredth. Then cover the body with earth, and divers new roots will iſſue, to make the ſame fruitfull.

Sap choaked.

132. And if your Tree beare not well, by reaſon that

that all the ſap runneth into leaves, which is a common fault in divers Orchards, then to check the ſap, cut off all the young roots that grow about the maſter roots; and croſſe hack the body under the ground, and likewiſe the maine roots, as before (*Num.* 131.) to avoid moſſe, and cover the Tree with earth againe: for by this meanes the ſap is kept from riſing up too plentifully. By *S.*

Barren trees to beare.

133. All barrenneſſe, or unfruitfulneſſe in Trees, doth for the moſt part ariſe, either by reaſon of their moſſineſſe, whoſe cure is ſet downe before in Numb. 131. or becauſe they are bark-bound; whoſe remedy

Cauſes of barrenneſs in trees.

is also in *Numb.* 130. or because they were planted too deepe, whose remedy is in *Num.* 132. or by reason that the sap, which should turne into fruit, runneth together, or for the most part into leaves: and this is remedied also in *Numb.* 133.

App'es without wrinckles.

134. Gather not your Pippins till the full Moon, after Michaelmas; so may you keepe them a whole yeare without shrinking: and so of the grapes, and all other fruits; so of Onion seeds, Annis seeds, and other seeds, which you would keepe full and plump. By *S.*

Respect between the stock and cions.

135. Let your tree whereon you graft, be more forward then the cions; *viz:* let

let it either have bigger buds then the cions hath, or ſmall leaves: but the cions is beſt that hath onely red buds, and no leaves.

136. I have ſeen Cherries grow in cluſters like Filberts, *viz.* 2, 3, 4, and 5. upon one ſtalk. *Quære*, if it be not performed in this manner; Joyne 2, 3, 4, or 5. leaves with the buds in one ſlit together, by way of inoculation, and ſo leave them. Cherries in cluſters

Here I will conclude with a conceit of that delicate Knight, Sir *Francis Carew*; who, for the better accompliſhment of his Royall entertainment of our late Queen of happy memory, at his houſe at *Beddington*, led her Majeſty to a Cherry tree,

tree, whoſe fruit he had of purpoſe kept back from ripening, at the leaſt one moneth after all Cherries had taken their farewell of *England*. This ſecret he performed, by ſtraining a Tent or cover of canvas over the whole tree, and wetting the ſame now and then with a ſcoope or horne, as the heat of the weather required; and ſo, by with-holding the ſun-beames from reflecting upon the berries, they grew both great, and were very long before they had gotten their perfect cherry colour: and when he was aſſured of her Majeſties comming, he removed the Tent, and a few ſunny dayes brought them to their full maturity.

A Philoſophicall Garden: with a touch at the vegetable work in Phyſick, whoſe principall fire is the Stomach of the Oſtrich.

FIrſt, pave a ſquare plot with brick, (and if it be covered with plaiſter of *Paris*, it is ſo much the better) making up ſides of brick alſo plaiſtered likewiſe: let this be of a convenient depth, fill it with the beſt vegetable ẏ which you can get, that hath ſtood two yeares, or one at the leaſt, quite within his owne Spheare: make *contrition* of the ſame; and be ſure to avoid all obſtructions, imbibe it with *Aqua cœleſtis* in a true proportion, grind it once a day till it be dry: being dry, let it ſtand two or three days without any imbibition, ẏ it may the better attract from all the heavenly

venly influence, continuing then also a *Philosophical contrition* every day (this grinding must also be used in the vegetable work where the ℥ of herbs is used instead of *aqua cœlestis*) during all the time of preparation: then plant what rare flowers, fruits, or seeds, you please therein. And (if my *Theory* of Nature deceive me not this ℥ so enriched from the heavens, without the help of any manner of soyl, marle, or compost (after one years revolution) will make the same to flourish and fructifie in a strange and admirable manner: yea, I am perswaded, that it will receive an *Indian* plant, and make all vegetables to prosper in the highest degree, and to bear their fruits in *England*, as naturally as they do in *Spain*, *Italy*, or elsewhere.

So likewise of that Walnut-tree, planted within the limits of the aforesaid Abby, which on St.

St. *Barnabias* Eve ſtandeth bare, and naked without leaves; and upon the day it ſelf, richly clothed with his green veſture.

I could remember many Philoſophical plants in England, were it not that the loſſe of *Ripley's* life, that renowned Alchymiſt, who ſuffered death (as the ſecret report goeth) for making a Pear-tree to fructifie in Winter, did command an *altum ſilentium* in theſe matters: but it was the denial of his medicine, and not the crime of conjuration, which was but colourably laid to his charge, that wrought his overthrow.

Nay, if the earth it ſelf, after it hath thus conceived from the clouds, were then left to bring forth her own fruits and flowers in her own time, and no ſeeds or plants placed therein by the hand of man, it is held very probable (unleſſe for the ſin of our firſt Parents,

rents begun in them, and mightily increaſed in us, the great God of Nature, even *Naturæ naturans*, ſhould recall, or ſuſpend thoſe fructifying bleſſings which at the firſt he conferred upon his cœleſtial Creatures) that this heavenly earth, ſo manured with the ſtarres, would bring forth ſuch ſtrange and glorious plants, fruits and flowers, as none of all the Herbariſts that ever wrote till this day, nor any other, unleſſe *Adam* himſelfe were alive againe, could either know, or give true and proper names unto theſe moſt admirable ſimples.

Alſo, in the work of fructification, I think that Corn it ſelf may be ſo philoſophically prepared, only by imbibition in the Philoſophers *aqua vitæ*, that any barren ground, ſo as it be in nature kindly for Corn, ſhall bring forth a rich crop, without any matter added to the ground, and ſo with

a

a ſmall or no charge, a man may ſow yearly upon the ſame ground And he that knoweth how to lay his fallowes truely, whereby they may become pregnant from the heavens, and draw abundantly that cœleſtial and generative vertue into the *Matrix* of the earth; this man, no doubt, will prove the true and philoſophical Huſbandman, and goe beyond all the Countrey *Coridons* of the Land, though never ſo well acquainted with *Virgils Georgicks*, or with Maſter *Bernhard Paliſſy* his congelative part of raine water, which he calleth the *Vegetable ſalt of Nature:* wherein though he obſerved more then either *Varro*, *Columella*, or any of the ancient Writers in this kind, did ever dream of; yet doth he come many degrees ſhort of this heavenly myſtery.

Now, to give you ſome taſte of that fire which the Philoſophers call

call the *Stomach of the Ostrich*, (without which the Philoſophers true and perfect *Aqua vitæ* can never be made) you muſt underſtand, that it is an outward fire of Nature, which doth not onely keepe your Glaſſe, and the matter therein contained, in a true proportionable heat, fit for workmanſhip, without the helpe of any ordinary or material fire: but it is alſo an efficient and principal cauſe, by his powerful nature and pearcing quality, to ſtir up, alter and exalt, that inward fire that is incloſed within the Glaſſe in his owne proper earth. And therefore here, all the uſual Chymical fires, with all their graduations, are utterly ſecluded; ſo as neither any naked fire, nor the heat of filings of Iron, of ſand, of aſhes, nor of *Baln. Mar.* though kept in a moſt exquiſite manner, nor any of the fires engendered by putrefaction, as of dung

dung and ſuch like, no nor the heat of the Sun, or of a Lamp, or an *Athanor* (the laſt refuge of our wandring and illiterate Alchymiſts) have here any place at all. So that by this fire and furnace onely, a man may eaſily diſcern a mercenary workman (if he deale in vegetables onely from a ſecond Philoſopher; and if in any thing (as no doubt in many things) then here eſpecially *vulgaris oculus caligat plurimum.*

This fire is by nature generally offered unto all, and yet none but the children of Art have power to apprehend it: for, being cœleſtial, it is not eaſily underſtood of an elemental braine; and being too ſubtile for the ſenſe of the Eye, it is left onely to the ſearch of a divine wit: and there I leave it for this time.

The phyſical uſe of this fire, is to divide a *Cœlum terræ*, and then to ſtellifie the ſame with any ani-

animall or vegetable ſtar, whereby in the end it may become a quintesſence.

Here I had thought to have handled that crimſon coloured ſalt of Nature, ſo farre exceeding all other ſalts, in a true, quick, and lively taſte, which is drawne from the Philoſophers earth, and worketh miraculous effects in mans body; and withall, to have examined that ſtrange opinion which Doctor *Quercitanus*, an excellent *Theoriſt* in Nature, and a great Writer in theſe dayes doth violently maintaine, in his diſcourſe upon *Salt-peter*.

But becauſe it is impertinent to this ſubject, and that I have diſcourſed more at large thereon in my Abſtract of *Corn. Agrip.* his Booke *De occult. Philoſ.* and for that *Quercitanus* doth ſhew himſelfe to be a true Lover of *Hermes* Houſhold, I will not ſtraine my wit, to write againſt any particular

ar perſon that profeſſeth himſelfe to be of that family; although both he, and ſome others, as great as himſelfe, muſt give me leave, whenſoever I ſhall be forced in that Booke to handle the practical part of Nature, and her proceſſe, happily to weaken ſome principles and poſitions, which both he and they have already publiſhed; excuſing my ſelfe with that golden ſaying of *Ariſtle*, Φίλος μὲν Σωκράτης, φίλος δὲ Πλάτων, ἀλλ' φιλτάτη ἡ ἀλήθεια. *Amicus Socrates, amicus Plato, ſed magis amica veritas.* But I am affraid I have been too bold with vulgar wits, who take no pleaſure to heare any man *altius philoſopharj*, that they can well underſtand; and therefore I have compiled this Book in plain termes, of ſuch a Garden and Orchard as will better ſerve for common uſe, and fit their wits and conceits much better.

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